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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/522,249	01/25/2005	Kazuyuki Kashiwabara	2005-0091A	6203
52349 7590 12/31/2007 WENDEROTH, LIND & PONACK L.L.P. 2033 K. STREET, NW SUITE 800 WASHINGTON, DC 20006			EXAMINER TAHA, SHAQ	
			ART UNIT 2146	PAPER NUMBER
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/522,249	Applicant(s) KASHIWABARA ET AL.	
	Examiner shaq taha	Art Unit 2146	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1 - 18 is/are pending in the application.
 4a) Of the above claim(s) 2 and 6 - 12 is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1 - 18 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|--|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date <u>1/25/2005</u> . | 6) <input type="checkbox"/> Other: ____ |

DETAILED ACTION

Applicant's arguments with respect to claims 1 - 18 have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

- Claims 1 – 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sequeira et al. (US 6,222,530), and further in view of Schnell et al. (US 6,199,133).

Regarding claim 1, Sequeira et al. teaches a device having a master function for use in a network system in which a master device manages at least one slave device, the device comprising: an own device information managing section operable to manage own device information of the device, which includes at least predetermined information, regarding a state change of the device, **[a Master Scheduler and a Slave Task Scheduler thereby ensuring that a failure of the Master Scheduler does not bring down the entire broadcast system, (Fig. 1), (Column 2, line 57)]**;

an other device information managing section operable to manage other device information regarding at least one other device connected to the network system, the other device information including at least availability of the master function, **[The devices, whether they are bit pumps or analog devices such as tape drives, are unable to operate independently without the scheduler controlling these devices, (Column 2, line 18), (Fig. 5)];**

a schedule information managing section operable to manage schedule information indicative of master device candidates by predetermined segment by a plurality of segments of at least time of day or season, **[Fig. 3A, (Ref # 70a);**

Sequeira et al. differs from the claimed invention is that obtaining information and comparing information regarding master and slave devices is not taught in Sequeira. Schnell teaches a device information processing section operable, when the device operates as the master device, to specify, at a predetermined time, a slave device from among a plurality of slave devices which are the master device candidates indicated by the schedule information in a segment of at least time of day or season corresponding to the predetermined time based on the other device information, and operable to obtain predetermined information regarding a state change of the specified slave device from the specified slave device, **[In this manner, a remote device coupled to a network device 104 including bus master capabilities may perform management functions by sending configuration commands or retrieving status or other information from the other network devices through the bus 102, (Column 6, line 9), wherein network device 104 obtains information about other slave devices];**

Schnell further teaches a switch controlling section operable to compare the predetermined information regarding the state change of the specified slave device obtained by the device information processing section with the predetermined information regarding the state change of the device included in the own device information, and operable, when the state change of the specified slave device is smaller than the state change of the device, to switch between a master operation operated by the device and a slave operation operated by the specified slave device, **[During phase 0, all remaining participants compare their MRQ[3:0] id number with value asserted on the B[3:0] signal on the bus 208. The bus master with matching MRQ [3:0] wins the arbitration and assumes control of the bus 208, (Column 11, line 38), wherein the information is compared between the slave and master devices to switch the operation between devices and win control of the bus].**

It would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify Sequeira to obtain predetermined information regarding a state change of the specified slave device from the specified slave device by Schnell.

One of ordinary skill in the art would have been motivated to make this modification in order provide the advantage of the change of obtaining predetermined information regarding a state change of the specified slave device from the specified slave device, to switch between a master operation operated by the device and a slave operation operated by the specified slave device.

Regarding claim 3, Sequeira et al. teaches the device according to claim 1, wherein the predetermined time is a time when a change occurs to the device's own device information of the device managed by the own device information managing section, **[processing said task and initiating at a predetermined time said media server to access and distribute said multimedia, (Column 22, lines 60 – 62)]**.

Regarding claim 5, Sequeira et al. teaches the device according to claim 3, wherein the change of the device's own device information of the device is a deterioration reduction in communication quality, **[a Master Scheduler and a Slave Task Scheduler thereby ensuring that a failure of the Master Scheduler does not bring down the entire broadcast system, (Column 2, lines 57 – 59)]**.

Regarding claim 13, Sequeira et al. teaches the device according to claim 1, wherein the switch controlling section transmits the other device information managed by the other device information managing section to a device newly performing the master operation the specified slave device, **[prepare media device to send the scheduled information at the appropriate time, (Column 3, line 12)]**.

Regarding claim 14, Sequeira et al. teaches a master/slave switching method to be performed on a device currently performing a slave operation by a device currently performing a master operation, **[Media Server 130 is comprised of Slave Task Scheduler 140 which communicates with Master Scheduler 120 through**

Master/Slave Scheduler API 180 and with Bit pump 150 through Device Specific API 190, (Column 4, lines 8 – 12)];

the method comprising: managing schedule information indicative of master device candidates by a plurality of segments of at least time of day or season, , **[processing said task and initiating at a predetermined time said media server to access and distribute said multimedia, (Column 22, lines 60 – 62)];**

specifying, at a predetermined time, a slave device from among a plurality of slave devices which are the master device candidates indicated by the schedule information in a segment of at least time of day or season corresponding to the predetermined time based on the other device information including at least availability of a master function of other devices connected to a network, **(Fig. 4B, Ref # 440) a Master Scheduler and a Slave Task Scheduler thereby ensuring that a failure of the Master Scheduler does not bring down the entire broadcast system, (Column 2, lines 56 – 59)];**

obtaining predetermined information regarding a state change of the specified slave device from the specified slave device; **[This information often resides in one or more databases, which can be, for instance, flat-file, relational or object-oriented databases, (Column 1, lines 58 – 60)];**

comparing the predetermined information regarding the state change of the specified slave device obtained in the obtaining of the predetermined information with predetermined information of regarding a state change of the device included in own device information of the device currently performing the master operation, **[a Master Scheduler and a Slave Task Scheduler thereby ensuring that a failure of the**

Master Scheduler does not bring down the entire broadcast system, (Column 2, line 57)];

and switching, when the state change of the specified slave device is smaller than the state change of the device, between the master operation operated by the device and a slave operation operated by the specified slave device, **[The Timeline and Task Management Unit 510 tracks the tasks received for the media server and controls the execution of a task on the media server, (Column 21, lines 11 – 14)].**

Regarding claim 15, Sequeira et al. teaches a computer-readable medium having a computer program stored thereon for causing a device currently performing a master operation to perform a method of performing a master/slave switching process on a device currently performing a slave operation, the computer program comprising the steps of: matching schedule information indicative of master device candidates by a plurality of segments of at least time of day or season; specifying, at a predetermined time, a slave device from among a plurality of slave devices which are the master device candidates indicated by the schedule information in a segment of at least time of day or season corresponding to the predetermined time based on other device information including at least availability of a master function of other devices connected to a network; obtaining predetermined information regarding a state change of the specified slave device from the specified slave device; comparing the predetermined information regarding the state change of the specified slave device obtained in the obtaining of the predetermined information with predetermined information regarding a

state change of the device indicated in own device information of the device currently performing the master; and
switching, when the state change of the specified slave device is smaller than the state change of the device, between the master operations operate by the device and a slave operation operated by the specified slave device, **[Column 24, line 5]**.

Regarding claim 16, Sequeira et al. teaches an integrated circuit for use in a device having a master function, **[Combiner Field 2110 identifies the combiner, a device for integrating multiple channels into one view, for the programs identified in Program Field 1911 for the particular combiner, (Column 16, lines 32 – 35) & (Fig.21)]**; the device being used in a network system in which a master device manages at least one slave device, **[In the preferred embodiment, the Master/Slave Scheduler API 130 is a synchronous protocol for distributing to and managing tasks in remote media servers, (Column 10, lines 4 – 7)]**; the integrated circuit comprising:
an own device information managing section operable to manage own device information, which includes at least predetermined information, regarding a state change of a device including the integrated circuit, **[In the preferred embodiment, the Master/Slave Scheduler API 130 is a synchronous protocol for distributing to and managing tasks in remote media servers, (Column 10, lines 4 – 7)]**;
an other device information managing section operable to manage other device information regarding at least one other device connected to the network system, **[In the preferred embodiment, the Master/Slave Scheduler API 130 is a synchronous**

protocol for distributing to and managing tasks in remote media servers, (Column 10, lines 4 – 7)]; the other device information including at least availability of the master function, [In the preferred embodiment, the Master/Slave Scheduler API 130 is a synchronous protocol for distributing to and managing tasks in remote media servers, (Column 10, lines 4 – 7)];

a schedule information managing section operable to manage schedule information indicative of master device candidates by a plurality of segments of at least time of day or season, **[execution code segment for executing said task at a predetermined time, (Column 24, lines 46 – 50)];**

a device information processing section operable, when the device operates as the master device, to specify, at a predetermined time, a slave device from among a plurality of slave devices which are the master device candidates indicated by the schedule information in a segment of at least time of day or season corresponding to the predetermined time based on the other device information, and operable to obtain predetermined information regarding a state change of the specified slave device from the specified slave device, **[The events are translated into tasks and sent to media servers for execution at a predetermined time by being further translated into media specific tasks to control a bit-pump, (See Abstract)];**

a switch controlling section operable to compare the predetermined information regarding the state change of the specified slave device obtained by the device information processing section--and with the predetermined information regarding the state change of the device included in the own, **[Note: This API message is used to**

code emergency procedures and specific setup and teardown procedures (such as initialization) for the specific devices. The suffix Sw denotes a variable used as a switch with values, (Tabl2. 2);

device information, and operable, when the state change of the specified slave device is smaller than the state change of the device, to switch between a master operation operated by the device and a slave operation operated by the specified slave device, **[The Timeline and Task Management Unit 510 tracks the tasks received for the media server and controls the execution of a task on the media server, (Column 21, lines 11 – 14)].**

Regarding claim 17, Sequeira et al. teaches the device according to claim 1, wherein the master device candidates indicated by the schedule information in a segment of time of day is at least one device other than a device which is likely to be frequently used in the segment of the time of day, **[Fig. 1, Ref # 190a].**

Regarding claim 18, Sequeira et al. teaches the device according to claim 1, wherein the master device candidates indicated by the schedule information in a segment of season is at least one device other than a device which is likely to be frequently used in the segment of season, **[Fig. 1, Ref # 190a].**

- Claims 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Sequeira et al. (US 6,222,530) as applied to claims 1 above, and further in view of Hart et al. (US 6,005,759).

Regarding Claims 4, Sequeira teaches the method according to claim 1, as described above. Sequeira further teaches a system and method for associating and controlling multimedia supporting events with a primary event. The events are translated into tasks and sent to media servers for execution at a predetermined time by being further translated into media specific tasks to control a bit-pump, **(See Abstract)**. Sequeira et al. differs from the claimed invention in that the change of the device's own device information is a reduction in a remaining amount of battery is not taught in Sequeira et al.

Hart teaches a system for monitoring and controlling an electrical distribution network comprises an electrical distribution substation having a local area network (LAN), a feeder subsystem and a gateway. The feeder subsystem is coupled to the substation and receives electrical energy therefrom for distribution to customers, and includes slave devices for performing switching functions. The gateway provides remote access to the slave devices and the LAN, **(See Abstract)**, and further teaches that the equipment analysis and testing application 24 provides off-line capability to remotely test distribution equipment. For example, a remote battery test could be periodically scheduled using the equipment scheduler, **(Column 6, lines 44 - 50)**. Hart provides the

advantage of the change of the device's own device information is a reduction in a remaining amount of battery.

It would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify Sequeira by including a reduction in a remaining amount of battery as taught by Hart.

One of ordinary skill in the art would have been motivated to make this modification in order provide the advantage of the change of the device's own device information is a reduction in a remaining amount of battery.

Conclusion

The following prior art made of record and not relied upon is cited to establish the level of skill in the applicant's art and those arts considered reasonably pertinent to applicant's disclosure. See **PEP 707.05(c)**.

The following are analogous art because they are from the same field of endeavor of Device, Method, and Program for performing Master/Slave Switching Process:

- Schnell et al. US Patent No: (6,199,133)
- Sequeira et al. US Patent No: (US 6,222,530)
- Hart et al. US Patent No: (US 6,005,759).
- Shirakawa et al. Pub No: (US 20030221138)
- Kashimura et al. Patent No: (JP 20011350)

Any inquiry concerning this communication or earlier communications from the examiner should be directed to **Shaq Taha** whose telephone number is 571-270-1921. The examiner can normally be reached on 8:30am-5pm Mon-Fri.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, **Jeff Pwu** can be reached on 571-272-6798.

Application/Control Number:
10/522,249
Art Unit: 2146

Page 14

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12/12/07

S. Taha



JEFFREY FWU
SUPERVISORY PATENT EXAMINER